

ABSTRACT OF THE DISCLOSURE

A gas generator comprising a pressure vessel containing a gas under a first predetermined pressure. An initiator housing closes one end of the pressure vessel and has an opening at the inner end thereof that is closed by an initiator rupture disk constructed to rupture at a second predetermined pressure in the initiator housing greater than the first predetermined pressure. A micro-gas generator or initiator is disposed within the initiator housing. A manifold closes the other end of the pressure vessel and has an opening at the inner end thereof closed by a manifold rupture disk constructed to rupture at a third predetermined pressure greater than the first predetermined pressure. Upon the firing of the micro-gas generator or initiator, the gas pressure in the initiator housing increases to or exceeds the second predetermined pressure to rupture the initiator rupture disk and create a pressure wave that travels through the pressure vessel to create a localized pressure at the manifold rupture disk that equals or exceeds the third predetermined pressure to rupture the manifold rupture disk and allow flow of cool pressurized gas through the manifold before the gas in the pressure vessel is significantly heated and pressurized by the gas flow from the initiator housing.